Kindly replace Table I beginning on Page 30, line 12 with the following:

α10pfor (SEQ ID No.: 18)	5'GTTCAGAACCTGGGTTGCTACGTTGTTTCCGGTCTGATC ATCTCCGCTCTGCTGCCGGCTGT-3'
α10pfor2 (SEQ ID No.: 19)	5'GGGGCATATGGTTCAGAACCTGGGTTGCTACGTTG-3'
α10prev (SEQ ID No.: 20)	5'GATAACCTGGGACAAGCTTAGGAAGTAGTTACCACCGT GAGCAACAG CCGGCAGCAGAGCGGA-3'
α10prev2 (SEQ ID No.: 21)	5'GGGGGGATCCGCGCGGCACCAGGCCGCTGATAACCTGG GACAAGCTTAGGAAGT-3'

IN THE CLAIMS:

Kindly replace claims 1, 2, 4, 6, 9, 10, 13, 15, 17, 23, 24, 25, 31, 33, 34, 35, 46, 48, 49, 50, 52, 54, 57, 58, 59, 64, 66, 67, 68, 78, 86, 88, 89, 90, 99, 101, 102, 103, 105, 107, 110, 111, 112, 117, 119, 120, 121, 122 and 127 with the following:

1. (Amended) A recombinant or isolated collagen binding integrin subunit α10 comprising essentially the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4, or homoloques or fragments thereof having essentially the same biological activity.

2. (Amended) A process of producing a recombinant integrin subunit α10 comprising essentially the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4 or homoloques or fragments thereof having essentially the same biological activity, which process comprises the steps of

a) isolating a polynucleotide comprising a nucleotide sequence coding for an integrin subunit α10, or homoloques or fragments thereof having essentially the same biological activity,

b) constructing an expression vector comprising the isolated polynucleotide,

c) transforming a host cell with said expression vector,

d) culturing said transformed host cell in a culture medium under conditions suitable for expression of integrin subunit α10, or homoloques or fragments thereof having essentially the same biological activity, in said transformed host cell, and, optionally,

e) isolating the integrin subunit α10, or homologues or fragments thereof having essentially the same biological activity, from said transformed host cell or said culture medium.

4. (Amended) An isolated polynucleotide comprising a nucleotide coding for an integrin subunit α10, or for homologues or fragments thereof having essentially the same biological activity, which polynucleotide comprises essentially the nucleotide sequence shown in SEQ ID No. 2 or SEQ ID No. 4 or suitable parts thereof.

6. (Amended) A vector comprising a polynucleotide or oligonucieotide coding for an integrin subunit α10, or for homologues or fragments thereof having essentially the same biological activity, which polynucleotide or oligonucleotide comprises essentially the nucleotide sequence shown in SEQ ID No. 2 or SEQ ID No. 4 parts thereof.

9. (Amended) A cell generated by steps a) to d) of the process as defined in claim 2, in which a polynucleotide or oligonucleotide coding for an integrin subunit α10, or for homologues or fragments thereof having essentially the same biological activity, which polynucleotide or oligonucleotide comprises the nucleotide sequence shown in SEQ ID No. 2 or SEQ ID No. 4 or parts thereof, has been stably integrated in the cell genome.

10. (Amended) Binding entities having the capability of binding specifically to an integrin subunit α10 comprising the amino acid sequence of SEQ ID No. 2 or SEQ ID No. 4 , or to homologues or fragments thereof.

13. (Amended) A recombinant or isolated integrin heterodimer comprising a subunit α10 and a subunit β, in which the subunit α10 comprises essentially the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4, and homologues and fragments thereof having essentially the same biological activity.

15. (Amended) A process of producing a recombinant integrin heterodimer comprising a subunit α10 and a subunit β, in which the subunit α10 comprises essentially the amino acid sequence shown in SEQ ID No. 2 and SEQ ID No. 4, homoloques and fragments thereof having essentially the same biological activity, which process comprises the steps of

a) isolating one polynucleotide comprising a nucleotide sequence coding for a subunit α10 of an integrin heterodimer and, optionally, another polynucleotide comprising a nucleotide sequence coding for a subunit β of an integrin heterodimer, or polynucleotides or oligonucleotides coding for homologues or fragments thereof having essentially the same biological activity,

b) constructing an expression vector comprising said isolated polynucleotide coding for said subunit α10 optionally in combination with an expression vector comprising said isolated nucleotide coding for said subunit β,

c) transforming a host cell with said expression vector or vectors,

d) culturing said transformed host cell in a culture medium under conditions suitable for expression of an integrin heterodimer comprising a subunit α10 and a subunit β, or homologues or fragments thereof having essentially the same biological activity, in said transformed host cell, and, optionally,

e) isolating the integrin heterodimer comprising a subunit α10 and a subunit β, or homologues or fragments thereof having essentially the same biological activity, or the α10 subunit thereof from said transformed host cell or said culture medium.

17. (Amended) A cell containing a first vector, said first vector comprising a polynucleotide or oligonucleotide coding for a subunit α10 of an integrin heterodimer, or

B14 for homologues or parts thereof having essentially the same biological activity, which polynucleotide or oligonucleotide comprises essentially the nucleotide sequence shown in SEQ ID No. 2 or SEQ ID No. 4 or parts thereof, and a second vector, said second vector comprising a polynucleotide or oligonucleotide coding for a subunit β of an integrin heterodimer, or for homologues or fragments thereof having essentially the same biological activity.

D15/B15 23. (Amended) A fragment according to claim 22, which is a peptide comprising the amino acid sequence SEQ ID No. 7.

24. (Amended) A fragment according to claim 22, which comprises the amino acid sequence from about amino acid No. 952 to about amino acid no. 986 of SEQ ID No. 2.

25. (Amended) A fragment according to claim 22, which is a peptide comprising the amino acid sequence from about amino acid No. 140 to about amino acid no. 337 of SEQ ID No. 2.

B16 but C1 31. (Amended) An *in vitro* process of using an integrin subunit α10 rising the amino acid sequence shown in SEQ ID No. 2 SEQ ID No. 4, or an integrin heterodimer comprising said subunit α10 and a subunit β, or a homologue or fragment of said integrin or subunit having essentially the same biologically activity, as a marker or target molecule of cells or tissues expressing said integrin subunit α10, which cells or tissues are of animal including human origin.

B17 but C3 33. (Amended) An *in vitro* process according to claim 31, whereby said fragment is a peptide comprising the amino acid sequence SEQ ID No.: 7 .

B17

34. (Amended) An *in vitro* process according to claim 31, whereby said fragment comprises the amino acid sequence from about amino acid no. 952 to about amino acid no. 986 of No. of SEQ ID no. 2.

C3 cont

35. (Amended) An *in vitro* process according to claim 31, whereby said fragment comprises the amino acid sequence from about amino acid no. 140 to about amino acid no. 337 of SEQ ID No. 1.

B18 C5

46. (Amended) An *in vitro* process of using binding entities having the capability of binding specifically to an integrin subunit α10 comprising the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4, or an integrin heterodimer comprising said subunit α10 and a subunit or to homoloques or fragments thereof having essentially the same biological activity, as markers or target molecules of cells or tissues expressing said integrin subunit α10, which cells or tissues are of animal including human origin.

B19 C6

48. (Amended) An *in vitro* process according to claim 46, whereby said fragment is a peptide comprising the amino acid sequence SEQ ID No.: 7.

49. (Amended) An *in vitro* process according to claim 46, were said fragment comprises the amino acid sequence from about amino acid no. 952 to about amino acid no. 986 of SEQ ID no. 2.

50. (Amended) An *in vitro* process according to claim 46, whereby said fragment comprises the amino acid sequence from about amino acid no. 140 to about amino acid No. 337 of SEQ ID No. 2.

B20 C9

52. (Twice Amended) An *in vitro* process according to any one of claims 46-51, which is a process for detecting the presence of an integrin subunit α10 comprising the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4 or of an integrin

B20 heterodimer comprising said subunit α10 and a subunit β, or of homologues or fragments thereof having essentially the same biological activity.

B21 C11 54. (Amended) An *in vitro* process for detecting the presence of a integrin subunit α10, or of a homologue or fragment of said integrin subunit having essentially the same biological activity, on cells, whereby a polynucleotide or oligonucleotide chosen from the group comprising a polynucleotide or oligonucleotide shown in SEQ ID No. 2 is used as a marker under hybridisation conditions wherein said polynucleotide or oligonucleotide fails to hybridise to a DNA or RNA encoding an integrin subunit al.

B22 C13 57. (Amended) An *in vitro* process according to claim 54, whereby said fragment peptide comprising the amino acid sequence SEQ ID No. 7.

58. (Amended) An *in vitro* process according to claim 54, whereby said fragment comprises the amino acid sequence from about amino acid No. 952 to about amino acid no. 986 of SEQ. ID, No. 2.

B23 C15 64. (Amended) An *in vitro* process for determining the differentiation-state of cells during development, in pathological conditions, in tissue regeneration and in therapeutic and physiological reparation of cartilage, whereby a polynucleotide or oligonucleotide chosen from the nucleotide sequence shown in SEQ ID No. 2 is used as a marker under hybridisation conditions wherein said polynucleotide or oligonucleotide fails to hybridise to a DNA or RNA encoding an integrin subunit α10.

B24 C17 66. (Amended) An *in vitro* process according to claim 65, whereby said polynucleotide or oligonucleotide is a polynucleotide or oligonucleotide coding for a peptide comprising the amino acid sequence SEQ ID No. 7.

B24 67. (Amended) An *in vitro* process according to claim 65, whereby said peptide comprises the amino acid sequence from about amino acid no. 952 to about amino acid no. 986 of SDQ ID No. 2.

Sub C17 cont

68. (Amended) An *in vitro* process according to claim 65, whereby said peptide comprises the amino acid sequence from about amino acid no. 140 to about amino acid no. 337 of SEQ ID No. 2.

B25 Sub C20 78. (Amended) An *in vitro* method of using binding entities having the capability of binding specifically to an integrin subunit α10 comprising the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4, or an integrin heterodimer comprising said subunit α10 and a subunit β or to homoloques or fragments thereof having essentially the same biological activity, for promoting adhesion of chondrocytes and/or osteoblasts to surfaces of implants to stimulate osseointegration.

B26 Sub C22 86. (Amended) A process of using a collagen binding integrin subunit α10 comprising the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4, or an integrin heterodimer comprising said subunit α10 and a subunit β, or a homologue or fragment of said integrin or subunit having essentially the same biologically activity, as a marker or target molecule of cells or tissues expressing said integrin subunit α10, which cells or tissues are of animal including human origin.

B27 Sub C24 88. (Amended) A process according to claim 86, whereby said fragment is a peptide comprising the amino acid sequence SEQ ID No.: 7.

89. (Amended) A process according to claim 86, whereby said fragment comprises the amino acid sequence from about amino acid no. 952 to about amino acid no. 986 of SEQ ID No. 2.

B27 C24

90. (Amended) A process according to claim 86, whereby said fragment comprises the amino acid sequence from about amino acid no. 140 to about amino acid no. 337 of SEQ ID No. 2.

B28 C26

99. (Amended) A process of using binding entities having the capability of binding specifically to an integrin subunit α10 comprising the amino acid sequence shown in SEQ ID No., 2 or SEQ ID No. 4, or an integrin heterodimer comprising said subunit α10 and a subunit β, or to homoloques or fragments thereof having essentially the same activity, as markers or target molecules of cells or tissues expressing said integrin subunit α10, which cells or tissues are of animal including human origin.

B29 C28

101. (Amended) A process according to claim 99, whereby said fragment is a peptide comprising the amino acid sequence SEQ ID No. 7.

102. (Amended) A process according to claim 99, whereby said fragment comprises the amino acid sequence from about amino acid no. 952 to about amino acid no. 986 of SEQ ID No. 2.

103. (Amended) A process according to claim 99, whereby said fragment comprises the amino acid sequence from about amino acid no. 140 to about amino acid No. 337 of SEQ ID No. 2.

B30 C30

105. (Twice Amended) A process according to any one of claims 99-104 which is a process for detecting the presence of an integrin subunit α10 comprising the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4, or of an integrin heterodimer comprising said subunit α10 and a subunit β, or of homoloques or fragments thereof having essentially the same biologically activity.

B31 Sub C 32 107. (Amended) A process for detecting the presence of an int r. subunit α10, or of a homologue or fragment of said integrin subunit having essentially the same activity, on cells, whereby a polynucleotide or oligonucleotide chosen from the group comprising a polynucleotide or oligonucleotide shown in SEQ ID No. 2 is used as a marker under hybridisation conditions wherein said polynucleotide or oligonucleotide fails to hybridise to a DNA or RNA encoding an integrin subunit α1.

B32 Sub C 34 110. (Amended) A process according to claim 107, whereby said fragment is a peptide comprising the amino acid sequence SEQ ID No. 7.

111. (Amended) A process according to claim 107, whereby said fragment comprises the amino acid sequence from about amino acid No. 952 to about amino acid no. 986 of SEQ ID No. 2.

112. (Amended) A process according to claim 107, whereby said fragment comprises the amino acid sequence from about amino acid No. 140 to about amino acid No. 337 of SEQ ID No. 2.

B33 Sub C 36 117. (Amended) A process for determining the differentiation-state of cells during development, in pathological conditions, in tissue regeneration and in therapeutic and physiological reparation of cartilage, whereby a polynucleotide or oligonucleotide chosen from the nucleotide sequence shown in SEQ ID No. 2 used as a marker under hybridisation conditions wherein said polynucleotide or oligonucleotide fails to hybridise to a DNA or RNA encoding an integrin subunit α10.

B34 Sub C 38 119. (Amended) A process according to claim 117, whereby said polynucleotide or oligonucleotide is a polynucleotide or oligonucleotide coding for a peptide comprising the amino c acid-sequence SEQ ID No. 7.

B34

120. (Amended) A process according to claim 117, whereby said polynucleotide or oligonucleotide is a polynucleotide or oligonucleotide coding for a peptide comprising the amino acid sequence from about amino acid no. 952 to about amino. 986 of SEQ ID No. 2.

121. (Amended) A process according to claim 117, whereby said polynucleotide or oligonucleotide is a polynucleotide or oligonucleotide coding for a peptide comprising the amino acid sequence from about amino acid no. 140 to about amino acid no. 337 of DEQ ID No. 2.

B35 Cont

127. (Amended) A method of using binding entities having the capability of binding specifically to an integrin subunit $\alpha 10$ comprising the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4, or an integrin heterodimer comprising said subunit $\alpha 10$ and a subunit β, or to homologues or fragments thereof having essentially the same biological activity, for promoting adhesion of chondrocytes and/or osteoblasts to surfaces of implants to stimulate osseointegration.